national spatial data infrastructure training program

Introduction to Metadata What is Metadata?

An overview of geospatial metadata, presentation formats, and role as a critical data component

fgdc

vers. <20060919>



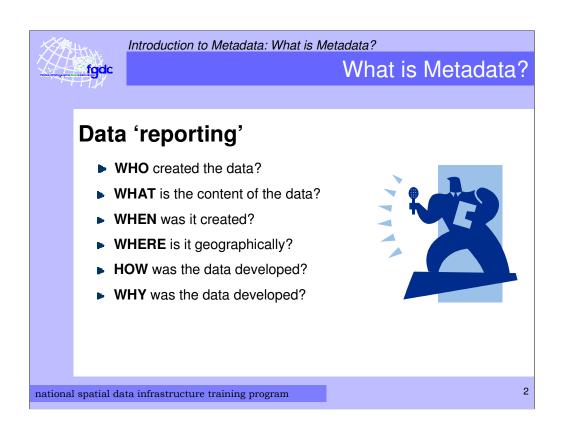
Learning Objectives

After completing this module the student can:

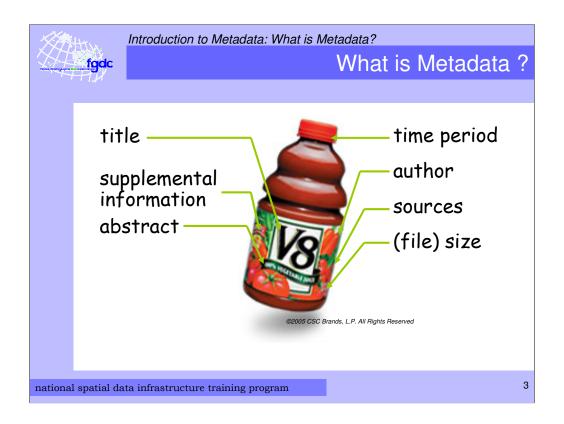
- explain the concept of metadata through the use of analogies
- describe metadata as the contextual component of the data set
- explain the role of metadata in the National Spatial Data Infrastructure

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Metadata is analogous to journalistic reporting



Metadata is analogous to product labeling.

Title? < V8 >

Time Period? < 'use by' date >

Sources? < ingredients >

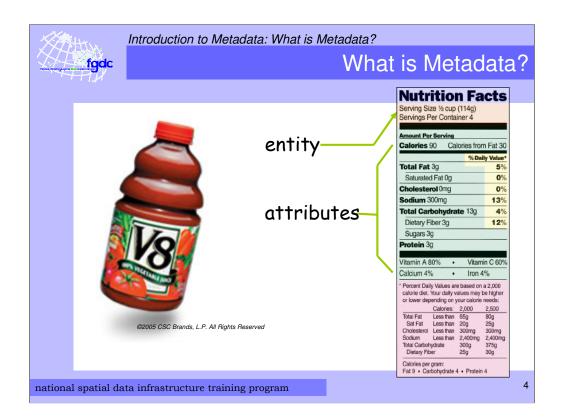
File Size? < container size (64 oz.) >

Author? < Campbell Soup Company >

Abstract? < 100% vegetable juice >

Supplemental Information? < green banner reads 'New...lower in

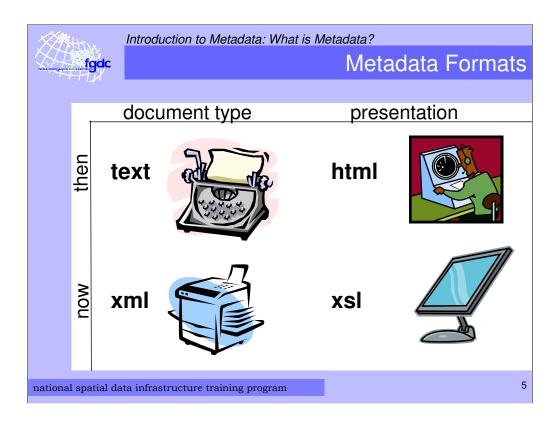
sodium' >



Metadata is analogous to product labeling. Identify each:

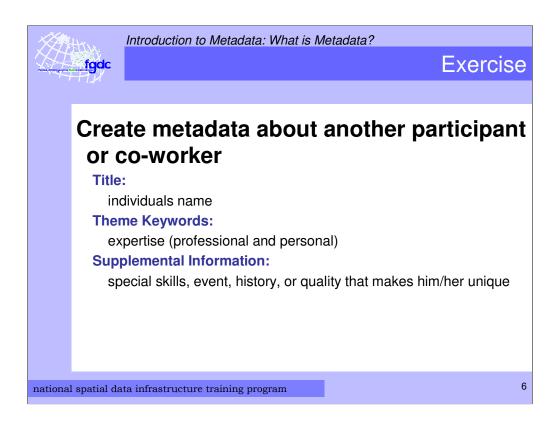
Entity? < serving size: ½ cup >

Attributes? < each nutritional component >



Click on each picture to see the same metadata file presented in different formats.

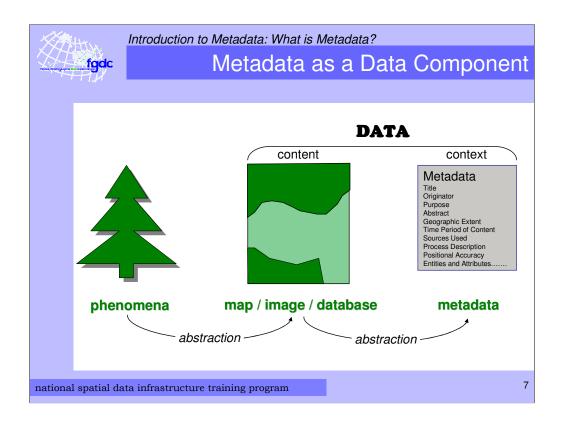
Note that xsl stylesheets can be designed to display select metadata elements. Multiple stylesheets can be developed to display the same metadata record to different audiences or purposes: data discovery, data application, internal data processing information, etc.



Exercise:

Cross-interview with another participant or co-worker and capture basic 'metadata' about each other.

Explore the Supplement Information element as an element that really can provide key insight to the data set or, in this case the person, e.g. is the individual a master basket weaver or did they bike across the state of TN?



Metadata should be considered a key component of the data.

A map/image/dbase is an abstraction of some real world phenomena.

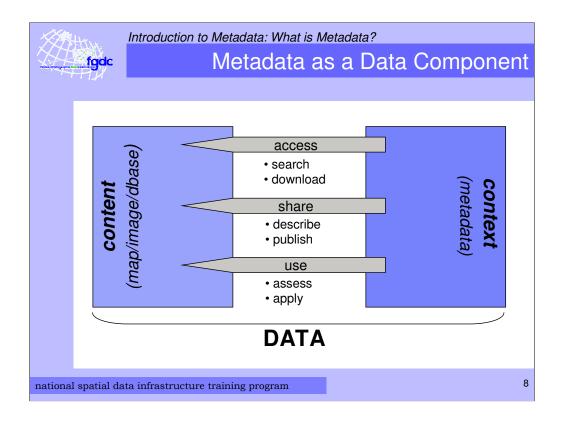
It abstracts one perspective of the phenomena that is represented by:

- a graphic that abstracts the image of our interest and/or
- a database that abstracts the information (attributes) of our interest

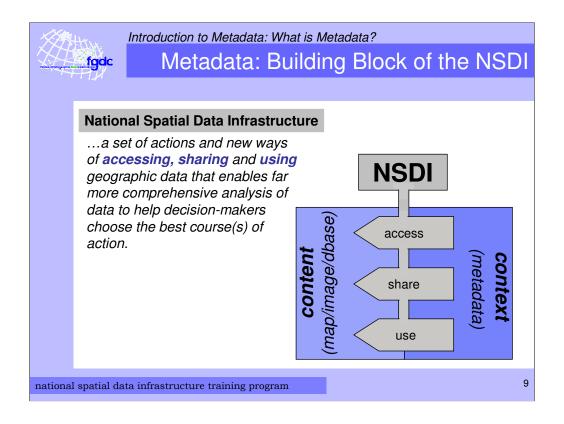
Consider the metadata as an abstraction of the map/image/dbase that provides the critical 'context' component

- why was the map/image/dbase created/abstracted?
- how was the map/image/dbase created/abstracted?
- what do the attribute abstractions (labels) mean?
- how can I access the map/image/dbase?

Both content and context are critical components of the data.

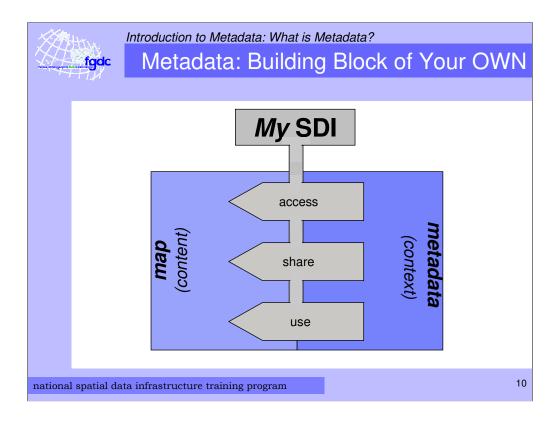


Metadata enables access to, the sharing of, and the use of the data content.

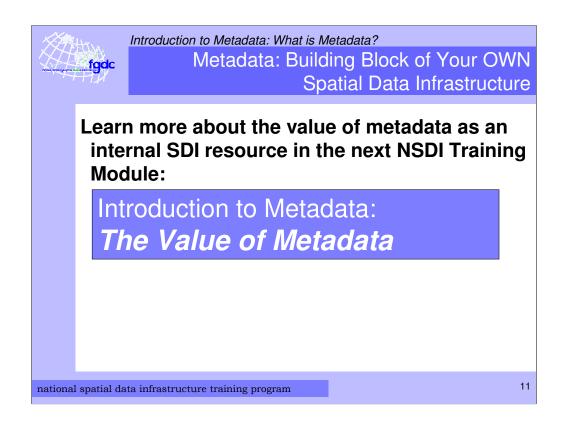


Notice that these same actions: access, share, and use are the functions of the NSDI.

Metadata is the building block of the NSDI.



You can use metadata internally, to create and manage your own SDI that will facilitate access, sharing, and use of your own data set.



Refer to http://www.fgdc.gov/training/training-materials